

ABSTRACT

To determine a network route corresponding to user needs, costs are dynamically defined for each link of a network. Specifically, based on link characteristics, routing factors are defined and for each factor, allowable values are defined. When determining a route, one or more routing factors and one or more allowable values for each factor are selected. Based on user prioritization of these factors and prioritization of the allowable values for each factor, weights are assigned to the factors and costs are assigned to the values. Link costs are determined by comparing a given link to each selected factor and determining for each factor which allowable value matches the link's characteristics. The cost of each matching value is then weighted by its corresponding factor. The weighted costs are summed to determine a link cost. The link costs are subsequently used to determine a route through the network.